

Ohio State University Nuclear Engineering Faculty Development Program

Executive Summary:

The goal of this proposed Ohio State University Nuclear Engineering Faculty Development Program is to provide necessary funding, in addition to the regular start-up funding, to attract, recruit, and retain highly qualified individuals to the Nuclear Engineering Program (NEP) at The Ohio State University (OSU). This Program is particularly important because the demand for such individuals across all sectors of the nuclear industry, including nuclear power utilities, national laboratories, vendors, and academia, is very high and still rising, but the supply of such individuals who can effectively fit into an academic setting is very limited. The continuing increase in student enrollment of nuclear engineering graduate students and minor students, and the plan to establish a nuclear engineering major at Ohio State make it essential to recruit high quality faculty into our Program. Consistent with the academic calendar and the anticipated timing of the start of this grant proposal, we plan to initiate a new search for a tenure track junior faculty member in nuclear engineering on September 1, 2010. The focus of the search will be an individual with a specialty area in nuclear materials. It is expected that the new hire would begin prior to Autumn Quarter 2011.

The requested funding from the US Nuclear Regulatory Commission will enable the new faculty member to initiate new programs that can contribute significantly to workforce training and first class research primarily in nuclear material and fuel areas in support of life extension of existing nuclear power reactors and design and construction of advanced reactors. The new faculty will expand OSU NEP's activities in areas of nuclear fuels and materials, which will be compatible with on-going activities in areas of advanced instrumentation and control, reactor safety, probabilistic risk assessment, software reliability, reactor thermal hydraulics, and new reactor designs. If this proposal is selected for award, the funding from this Grants program will be used to support this new hire and help OSU build a stronger NE program.

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